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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,958	09/29/2003	Michael J. Brubacher	729-P-4	5275

7590

08/19/2004

Gregory J. Nelson
NELSON & ROEDIGER
Suite 212
3333 E. Camelback Road
Phoenix, AZ 85018

EXAMINER

THOMAS, DAVID B

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 08/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/674,958	BRUBACHER, MICHAEL J.	
	Examiner	Art Unit	
	David B. Thomas	3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-12 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 2,3,6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purdy et al. (179,056) in view of Erdogan et al. (5,823,859).

Purdy et al. ('056) disclose a stone and glass polishing machine which includes a manually driven shaft, which imparts motion to both a surfacing wheel G, and a reciprocating work piece carrier O. Purdy et al. ('056) disclose the claimed apparatus except for using the apparatus for fiber optic ends. Erdogan et al. ('859) disclose an apparatus for polishing the end faces of bare fiber optical fibers or connector terminated fibers and teaches the combination of a holder for the fiber optic ends, a polishing wheel including a planar arbor plate, and, an indexing means for the holder. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Purdy et al. ('056) by replacing the surfacing wheel with a polishing wheel, and by providing a holder for fiber optic ends and ferrules, such as the holder and polishing wheel as taught by Erdogan et al. ('859), when a user of the device intends to use the device for polishing fiber optic ends.

3. Claims 1, 4, 5, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hepworth (5,810,646) in view of Erdogan et al. ('859), as applied above.

Hepworth ('646) discloses a means for producing relative reciprocatory movement between two members in a device having a grinding wheel and a work piece carrier, where the rotation of the shaft for the grinding wheel is transmitted to the reciprocating work piece carrier via a pinion. Hepworth ('646) also discloses that one of a number of adapters for holding a particular workpiece may be used in the device (Col. 1, lines 10-13). Hepworth ('646) discloses the claimed apparatus except for using a grinding wheel rather than a polishing wheel, or the provision of a holder for fiber optic ends and ferrules. Erdogan et al. ('859) is discussed above. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Hepworth ('646) by replacing the grinding wheel with a polishing wheel, and by providing a holder for fiber optic ends and ferrules, such as the holder and polishing wheel as taught by Erdogan et al. ('859), when a user of the device intends to use the device for polishing fiber optic ends.

Allowable Subject Matter

4. Claims 2, 3, 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claims 10-12 are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter: It is the examiner's opinion that the following limitations: transmission means for changing the gear ratio; the indexing means being driven at a rate approximately equal to the diameter of the cable fiber per revolution of the drive shaft; a generally

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annular arbor plate; or, electronic means for audibly monitoring the polishing, together in combination with the rest of the limitations in the independent claims, have neither been anticipated, nor rendered obvious by the prior art of record, as a whole, alone, or in combination.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Grabbe, Flanders et al., Crocker et al., Buzzetti, Maack, Doyle, and Forman et al. each disclose a device for polishing ends of fiber optics. Cornell discloses a granite dressing machine which includes a reciprocating work piece carrier driven by the shaft which rotates the finishing wheel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David B. Thomas whose telephone number is (703) 308-4250. The examiner can normally be reached on 7-4 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (703) 308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


dbt

David B. Thomas
Patent Examiner
Art Unit 3723